ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

SIMULATION BASED PROJECTS LIST

M.Tech/ M.E ELECTRICAL SIMULATION 2020-2021Projects List

S.No.	Title of The Paper	Year of Publication
1.	A new multi-level inverter with reverse connected dual dc to dc converter at simulation	2022
2.	A Grid Frequency Support Control Strategy of the Three-Phase Cascaded H-Bridge Based Photovoltaic Generation Systems	2022
3.	A New Multi-Output DC-DC Converter for Electric Vehicle Application	2022
4.	A Pencil Shaped 9-Level Multilevel Inverter With Voltage Boosting Ability: Configuration and Experimental Investigation	2022
5.	A Power Management Scheme for Grid-connected PV Integrated with Hybrid Energy Storage System	2022
6.	A Ring-Connected Dual Active Bridge Based DC-DC Multiport Converter for EV Fast-Charging Stations	2022
7.	A Switched-Capacitor Multilevel Inverter Using Series-Parallel Conversion With Reduced Components	2022
8.	Active Converter Injection-based Protection for a Photovoltaic DC Distribution System	2022
9.	Battery Current-Sharing Power Decoupling Method for Realizing a Single-Stage Hybrid PV System	2022
10.	Bidirectional Power Control Strategy for Super Capacitor Energy Storage System Based on MMC DC-DC Converter	2022
11.	Conception and Experimental Validation of a Standalone Photovoltaic System Using the SUPC5 Multilevel Inverter	2022
12.	Control of PV Systems for Multimachine Power System Stability Improvement	2022
13.	Deep Neural Network-Based Surrogate Model for Optimal Component Sizing of Power Converters Using Deep Reinforcement Learning	2022
14.	Design of Active Fault-Tolerant Control System for Multilevel Inverters to Achieve Greater Reliability With Improved Power Quality	2022
15.	Drive Control of a Permanent Magnet Synchronous Motor Fed by a Multi-level Inverter for Electric Vehicle Application	2022
16.	Dynamic Voltage Stability Enhancement in Electric Vehicle Battery Charger Using Particle Swarm Optimization	2022

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142. Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

17.	Improved Instantaneous Reactive Power (PQ) Theory Based Control of DVR for Compensating Extreme Sag and Swell	2022
18.	Improved Squirrel Search Algorithm Driven Cascaded 2DOF-PID-FOI Controller for Load Frequency Control of Renewable Energy Based Hybrid Power System	2022
19.	Investigation and validation of solar photovoltaic‘ fed modular multilevel inverter for marine water ‘pumping applications	2022
20.	Investigation on Amplitude-Domain Modulation for Three-Phase Energy Stored Quasi-Z Source Inverter	2022
21.	Low-voltage ride through of multi-port power electronic transformer	2022
22.	Machine Learning-Based Estimation of Output Current Ripple in PFC-IBC Used in Battery Charger of Electrical Vehicles: A Comparison of LR, RF and ANN Techniques	2022
23.	Model-Based Maximum Power Point Tracking Algorithm With Constant Power Generation Capability and Fast DC-Link Dynamics for Two-Stage PV Systems	2022
24.	Multi-Functional PV Inverter With Low Voltage Ride-Through and Constant Power Output	2022
25.	Multi-Objective Design of Single-Phase Differential Buck Inverters With Active Power Decoupling	2022
26.	Multi-Objective Optimization of PV and Energy Storage Systems for Ultra-Fast Charging Stations	2022
27.	Multi-Port DC-AC Converter with Differential Power Processing DC-DC Converter and Flexible Power Control for Battery ESS Integrated PV Systems	2022
28.	Negative Sequence Compensation Method for High-Speed Railway With Integrated Photovoltaic Generation System	2022
29.	New Powertrain Configurations Based on Six-Phase Current-Source Inverters for Heavy-Duty Electric Vehicles	2022
30.	Online State of Health Diagnostic Method of Battery cells in a Reconfigurable Battery System or Multilevel Inverter	2022
31.	Operating Principle of Neutral-Point-Less (NPL) Multilevel Inverter Topology: X-type Inverter	2022
32.	Optimal Controllers to Improve Transient Recovery of Grid-Following Inverters Connected to Weak Power Grids	2022
33.	Optimal Management for Megawatt Level Electric Vehicle Charging Stations With a Grid Interface Based on Modular Multilevel Converter	2022
34.	Optimized Controller Gains Using Grey Wolf Algorithm for Grid Tied Solar Power Generation with Improved Dynamics and Power Quality	2022

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

35.	Optimized Fuzzy Controller Based on Cuckoo Optimization Algorithm for Maximum Power-Point Tracking of Photovoltaic Systems	2022
36.	Optimized Reactive Power Control of Module Power Imbalance of Cascaded Converter	2022
37.	Modeling and Estimation of the Losses of a Multi-Level Inverter with Integrated Battery for Electric Vehicles	2022
38.	Performance Evaluation of an Active Neutral-Point-Clamped Multilevel Converter for Active Filtering in G2V-V2G and V2H Applications	2022
39.	Performance Evaluation of Seven Level Reduced Switch ANPC Inverter in Shunt Active Power Filter With RBFNN-Based Harmonic Current Generation	2022
40.	Photovoltaic Partial Shading Performance Evaluation With a DSTATCOM Controller	2022
41.	Power System Frequency Control Architecture Combining Open Charge Point Protocol and Electric Vehicle Model Predictive Charge Rate Control	2022
42.	Predictive Control With Battery Power Sharing Scheme for Dual Open-End-Winding Induction Motor Based Four-Wheel Drive Electric Vehicle	2022
43.	Proportional-Integral-Derivative Parametric Autotuning by Novel Stable Particle Swarm Optimization (NSPSO)	2022
44.	Reduced Sensor-Based Harmonic Resonance Detection and its Compensation in Power Distribution System With SAPF	2022
45.	Soft Switching Multiphase Interleaved Boost Converter With High Voltage Gain for EV Applications	2022
46.	Solar Photovoltaic System-Based Reduced Switch Multilevel Inverter for Improved Power Quality	2022
47.	Solar PV-Fed Multilevel Inverter With Series Compensator for Power Quality Improvement in Grid-Connected Systems	2022
48.	The optimization of torque ripple reduction by using DTC-multilevel inverter	2022
49.	Three Phase Four Switch Inverter Based DVR for Power Quality Improvement With Optimized CSA Approach	2022
50.	Three-Level T-Type Quasi-Z Source PV Grid-Tied Inverter With Active Power Filter Functionality Under Distorted Grid Voltage	2022

S.NO	PROJECTS LIST	IEEE
1	A Generalized Carrier-Overlapped PWM Method for Neutral-Point Clamped Multilevel Converters	2020
2	A Generalized Switched Inductor Cell Modular Multilevel Inverter	2020

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142. Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

3	A Low-harmonic Control Method of Bi-directional Three-phase Z-source Converters for Vehicle-to-Grid Applications	2020
4	A Microgrid Based on Wind Driven DFIG, DG and Solar PV Array for Optimal Fuel Consumption	2020
5	A New Step-Up Switched-Capacitor Voltage Balancing Converter for NPC Multilevel Inverter-Based Solar PV System	2020
6	A Single Input Variable FLC for DFIG Based WPGS in Standalone Mode	2020
7	An Efficient Inductive Power Transfer Topology for Electric Vehicle Battery Charging	2020
8	Asymmetrical Triangular Current Mode (ATCM) for Bidirectional High Step Ratio Modular Multilevel Dc–Dc Converter	2020
9	Auto-Tuning Proportional-Type Synchronization Algorithm for DC Motor Speed Control Applications	2020
10	Cascaded Multilevel Inverter Based Power and Signal Multiplex Transmission for Electric Vehicles	2020
11	Cascaded Multilevel PV Inverter With Improved Harmonic Performance During Power Imbalance Between Power Cells	2020
12	Delta-Bar-Delta Neural Network (NN) Based Control Approach for Power Quality Improvement of Solar PV Interfaced Distribution System	2020
13	Dual-T-Type Five-Level Cascaded Multilevel Inverter With Double Voltage Boosting Gain	2020
14	Five-level one-capacitor boost multilevel inverter	2020
15	Generalized Phase-Shift PWM for Active-Neutral-Point-Clamped Multilevel Converter	2020
16	Grid-Connected Wind-Photovoltaic Cogeneration Using Back-to-Back Voltage Source Converters	2020
17	Hybrid cuckoo search algorithm and grey wolf optimiser-based optimal control strategy for performance enhancement of HVDC-based offshore wind farms	2020
18	Implementation of Solar PV- Battery and Diesel Generator Based Electric Vehicle Charging Station	2020
19	Incremental Passivity Control in Multilevel Cascaded H-Bridge Converters	2020
20	Integration of solar PV into grid using a new UPQC with differential inverter control	2020
21	Mitigation of transient overvoltages in microgrid including PV arrays	2020
22	Multilevel Converters with Symmetrical Half-Bridge Submodules and Sensorless Voltage Balance	2020
23	Multilevel Single-Phase Converter with Two DC Links	2020
24	Off-board electric vehicle battery charger using PV array	2020
25	Power optimisation scheme of induction motor using FLC for electric vehicle	2020

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

26	Self-Adjustable Step-Based Control Algorithm for Grid-Interactive Multifunctional Single-Phase PV-Battery System Under Abnormal Grid Conditions	2020
27	Sensorless SynRG Based Variable Speed Wind Generator and Single-stage Solar PV Array Integrated Grid System with Maximum Power Extraction Capability	2020
28	Single-phase boost DC-link integrated cascaded multilevel inverter for PV applications	2020
29	Single-Phase Dual-Mode Interleaved Multilevel Inverter (DMIMI) for PV Applications	2020
30	Switched-capacitor multilevel inverter with self-voltage-balancing for high-frequency power distribution system	2020
31	Unbiased Circular Leakage Centered Adaptive Filtering Control for Power Quality Improvement of Wind-Solar PV Energy Conversion System	2020
32	ZPUC: A New Configuration of Single DC Source for Modular Multilevel Converter (MMC) Applications	2020
33	A Generalized Multilevel Inverter Topology with Reduction of Total Standing Voltage	2020
34	A New Asymmetric Multilevel Inverter with Reduced Number of Components	2020
35	A Novel High-Gain DC-DC Converter Applied in Fuel Cell Vehicles	2020
36	A Step-up Multilevel Inverter Topology using Novel Switched Capacitor Converters with Reduced Components	2020
37	Adaptive Control of Voltage Source Converter Based Scheme for Power Quality Improved Grid-Interactive Solar PV- Battery System	2020
38	An Experimental Estimation of Hybrid ANFIS–PSO-Based MPPT for PV Grid Integration Under Fluctuating Sun Irradiance	2020
39	Bidirectional Buck-Boost Current-Fed Isolated DC-DC Converter and Its Modulation	2020
40	Control Algorithm based on Limit Cycle Oscillator-FLL for UPQC-S with Optimized PI Gains	2020
41	Enhanced DVR Control System based on the Harris Hawks Optimization Algorithm	2020
42	Grid Synchronization of WEC-PV-BES Based Distributed Generation System using Robust Control Strategy	2020
43	High Performance Frequency Converter Controlled Variable-Speed Wind Generator Using Linear-Quadratic Regulator Controller	2020
44	Improved Power Quality in a Solar PV Plant Integrated Utility Grid by Employing a Novel Adaptive Current Regulator	2020
45	Improving Microgrid Low-Voltage Ride-Through Capacity Using Neural Control	2020
46	Nonisolated DC-DC Converters with Wide Conversion Range for High-Power Applications	2020
47	Power Quality Improvement in Solar Fed Cascaded Multilevel Inverter with Output Voltage Regulation Techniques	2020
48	PSO optimized PIDF controller for Load-frequency control of A.C Multi-Islanded-Micro grid system	2020
49	Single-Stage PV-Grid Interactive Induction Motor Drive with Improved Flux Estimation Technique for Water Pumping with Reduced Sensors	2020
50	Switched Capacitor Integrated (2n+1)-Level Step-up Single-Phase Inverter	2020

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142.
Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

M.Tech/ M.E ELECTRICAL SIMULATION 2019-2020

Projects List

01	Power Factor Correction of Three-Phase PWM AC Chopper Fed Induction Motor Drive System Using HBCC Technique.	2019
02	A Power Electronic Traction Transformer Configuration with Low-Voltage IGBTs for Onboard Traction Application.	2019
03	Carrier-Based Digital PWM and Multirate Technique of a Cascaded H-Bridge Converter for Power Electronic Traction Transformers.	2019
04	Operation Analysis and A Game Theoretic Approach to Dynamic Hybrid Compensator for the V/v Traction System.	2019
05	Coordination of MMCs With Hybrid DC Circuit Breakers for HVDC Grid Protection.	2019
06	A New Multilevel Inverter Topology With Reduce Switch Count.	2019
07	A Novel Multilevel DC/AC Inverter Based on Three-Level Half Bridge With Voltage Vector Selecting Algorithm	2019
08	A Novel Sub module Voltage Balancing Scheme for Modular Multilevel Cascade Converter—Double-Star Chopper-Cells (MMCC-DSCC) Based STATCOM.	2019
09	A Single-Phase Transformer-Based Cascaded Asymmetric Multilevel Inverter With Balanced Power Distribution.	2019
10	Active power decoupling and controlling for single-phase FACTS device.	2019
11	Analysis of Logic Gates for Generation of Switching Sequence in Symmetric and Asymmetric Reduced Switch Multilevel Inverter.	2019
12	Design and Hardware Implementation Considerations of Modified Multilevel Cascaded H-Bridge Inverter for Photovoltaic System	2019
13	Direct Model Predictive Control of Novel H-Bridge Multilevel Inverter Based Grid-Connected Photovoltaic System.	2019
14	Fuel cell integrated unified power quality conditioner for voltage and current reparation in four-wire distribution grid.	2019
15	Grid-tied single source quasi-Z-source cascaded multilevel inverter for PV applications.	2019
16	Low Switching Frequency Based Asymmetrical Multilevel Inverter Topology With Reduced Switch Count.	2019
17	Optimal Design of a New Cascaded Multilevel Inverter Topology With Reduced Switch Count.	2019
18	Switch Ladder Modified H-Bridge Multilevel Inverter With Novel Pulse Width Modulation Technique.	2019
19	Role of Outage Management Strategy in Reliability Performance of Multi-Micro grid Distribution Systems.	2019
20	Improved Coordinated Control Strategy for Hybrid STATCOM Using Required Reactive Power Estimation Method.	2019
21	Fault tolerant single-phase capacitor start capacitor run induction motor powered with cascaded multilevel quasi impedance source inverter.	2019
22	Coordination control of positive and negative sequence voltages of cascaded H-bridge STATCOM operating under imbalanced grid voltage.	2019
23	Control and operation of the MMC-based drive with reduced capacitor voltage fluctuations	2019
24	Application of UPFC to mitigate SSR in series compensated wind farms	2019

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142.
Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

25	A Unified Power Flow Controller Using a Power Electronics Integrated Transformer	2019
26	A 13-levels Module (K-Type) with two DC sources for Multilevel Inverters	2019
27	A Boost Type Nine-Level Switched Capacitor Inverter	2019
28	A Hybrid 9-level, 1-ϕ Grid Connected Multi Level Inverter with Low Switch Count and Innovative Voltage Regulation Techniques Across Auxiliary Capacitor.	2019
29	A Multi-Cell Cascaded High Frequency Link Inverter with Soft-Switching and Isolation.	2019
30	A new pulse active width modulation (PAWM) for multilevel converters.	2019
31	A new standby structure integrated with boost PFC converter for Server Power supply.	2019
32	A Novel Bidirectional T-type Multilevel Inverter for Electric Vehicle Applications.	2019
33	A Novel Nine-Level Quadruple Boost Inverter with Inductive-load Ability.	2019
34	A Novel Step-Up Single Source Multilevel Inverter: Topology, Operating Principle and Modulation.	2019
35	A Second-Order Volterra Filter Based Control of Solar PV-DSTATCOM System to Achieve Lyapunov's Stability	2019
36	A Sinusoidal Pulse Width Modulation (SPWM) Technique for Capacitor Voltage Balancing of Nested T-Type Four-Level Inverter.	2019
37	Analysis, Design and Control of Switching Capacitor Based Buck-Boost Converter	2019
38	Compact Switched Capacitor Multilevel Inverter (CSCMLI) With Self Voltage Balancing and Boosting Ability.	2019
39	Coordination control of positive and negative sequence voltages of cascaded H-bridge STATCOM operating under imbalanced grid voltage.	2019
40	Cross-Switched Multilevel Inverter using Novel Switched Capacitor Converters.	2019
41	Dual P-Q Theory based Energy Optimized Dynamic Voltage Restorer for Power Quality Improvement in Distribution System	2019
42	Dual Role CDSC based Dual Vector Control for Effective Operation of DVR with Harmonic Mitigation	2019
43	Dual-T-Type Seven-Level Boost Active-Neutral Point-Clamped (DTT-7L-BANPC) Inverter	2019
44	Effect of cascade STATCOM on stabilizing voltage in high voltage direct current	2019
45	Enhancement of Solar Farm Connectivity with Smart PV Inverter PV-STATCOM.	2019
46	Extended Topology for Boost DC-DC Converter.	2019
47	Family of Multiport Switched-Capacitor Multilevel Inverters for High Frequency AC Power Distribution	2019
48	Flexible Transformer Based Multilevel Inverter Topologies	2019
49	Framework of Gradient Descent Least Squares Regression Based NN Structure for Power Quality Improvement in PV Integrated Low-Voltage Weak Grid System	2019
50	High-Efficiency Bidirectional Buck-Boost Converter for Photovoltaic and Energy Storage Systems in a Smart Grid	2019

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142.
Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

51	Implementation of Immune Feedback Control Algorithm for Distribution Static Compensator.	2019
52	Low-Capacitance Statcom with Modular Inductive Filter	2019
53	Model Predictive Control of Multilevel CHB STATCOM in Wind Farm Application Using Diophantine Equations	2019
54	Model Predictive Controller with Reduced Complexity for Grid Tied Multilevel Inverters.	2019
55	PNKLMF Based Neural Network Control and Learning based HC MPPT Technique for Multi-Objective Grid Integrated Solar PV Based Distributed Generating System	2019
56	Power Quality Improvement and PV Power Injection by DSTATCOM with Variable DC Link Voltage Control from RSC-MLC.	2019
57	Protection of Sensitive Loads Using Sliding Mode Controlled Three-Phase DVR With Adaptive Notch Filter.	2019
58	Real-Time Validation of a Sliding Mode Controller for Closed-Loop Operation of Reduced Switch Count Multilevel Inverters	2019
59	Single Stage SECS Interfaced with Grid Using ISOGI-FLL Based Control Algorithm.	2019
60	SSO of DFIG-based wind farm integrated by a hybrid series compensator.	2019
61	Stability Analysis for the Grid-Connected Single Phase Asymmetrical Cascaded Multilevel Inverter with SRF-PI Current Control under Weak Grid Conditions	2019
62	Switched-Boost Action Based Multi-port Converter.	2019
63	Switched-Capacitor Based Single Source Cascaded H-bridge Multilevel Inverter Featuring Boosting Ability	2019
64	Unbalanced and Reactive Load Compensation using MMCC-based SATCOMs with Third Harmonic Injection.	2019

M.Tech/ M.E 2018-2019 Projects List

1	Standalone Photovoltaic WMSRer Pumping System Using Induction Motor Drive with Reduced Sensors	2018
2	A Novel Design of Hybrid Energy Storage System for Electric Vehicles	2018
3	Single Stage PV Array Fed Speed Sensor less Vector Control of Induction Motor Drive for WMSRer Pumping.	2018
4	Design and Performance Analysis of Three-Phase Solar PV IntegrMSRed UPQC.	2018
5	A New H-Bridge Hybrid Modular Converter (HBHMC) for HVDC ApplicMSRion: OperMSRing Modes, Control and Voltage Balancing	2018
6	Rectifier Load Analysis for Electric Vehicle Wireless Charging System.	2018
7	Development of a Bidirectional DC/DC Converter with Dual-BMSRtery Energy Storage for Hybrid Electric Vehicle System.	2018
8	An Improved DC-Link Voltage Control StrMSRegy for Grid Connected Converters.	2018
9	Design and ImplementMSRion of Active Power Control with Improved P&O Method for Wind PV-BMSRtery based Standalone GenerMSRion System	2018
10	Single-stage ZETA-SEPIC-based multifunctional integrMSRed converter for plugin electric vehicles	2018
11	Modeling, Design, Control, and ImplementMSRion of a Modified Z-source IntegrMSRed PV/Grid/EV DC Charger/Inverter	2018

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142.
Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

12	A Simple Active and Reactive Power Control for ApplicMSRions of Single-Phase Electric Springs	2018
13	UDE-Based Current Control StrMSRegy for LCCL-Type Grid-Tied Inverters	2018
14	A New Design Method of an LCL Filter Applied in Active DC-Traction SubstMSRions	2018
15	A Very High Resolution Stacked Multilevel Inverter Topology for Adjustable Speed Drives	2018
16	ImplementMSRion and Comparison of Symmetric and Asymmetric Multilevel Inverters for Dynamic Loads	2018
17	ReconfigurMSRion of NPC Multilevel Inverters to MitigMSRe Short Circuit Faults Using Back-to-Back Switches	2018
18	Irradiance-adaptive PV Module IntegrMSRed Converter for High Efficiency and Power Quality in Standalone and DC Microgrid ApplicMSRions	2018
19	Dual-function PV-ECS integrMSRed to 3P4W distribution grid using 3M-PLL control for active power transfer and power quality improvement.	2018
20	ZSI for PV systems with LVRT capability.	2018
21	Crisscross switched multilevel inverter using cascaded semi-half-bridge cells	2018
22	Single-phase hybrid cascaded H-bridge and diode-clamped multilevel inverter with capacitor voltage balancing	2018
23	Control of Solar Photovoltaic IntegrMSRed Universal Active Filter Based on Discrete Adaptive Filter	2018
24	A Buck & Boost based Grid Connected PV Inverter Maximizing Power Yield from Two PV Arrays in MismMSRched Environmental Conditions	2018
25	A Grid Connected Single Phase Transformerless Inverter Controlling Two Solar PV Arrays OperMSRing under Different MSRmospheric Conditions	2018
26	Single-phase multilevel inverter topologies with self-voltage balancing capabilities	2018
27	A Three-Phase Symmetrical DC-Link Multilevel Inverter with Reduced Number of DC Sources	2018
28	A Bridge Modular Switched-Capacitor-Based Multilevel Inverter With Optimized SPWM Control Method And Enhanced Power-Decoupling Ability	2018
29	Single-Phase Modified Quasi-Z-Source Cascaded Hybrid Five-Level Inverter	2018
30	Improved control algorithm for grid connected cascaded H-bridge photovoltaic inverters under asymmetric operMSRing conditions	2018
31	Power-decoupling of a Multi-port IsolMSRed Converter for an Electrolytic-capacitorless Multi-level Inverter.	2018
32	VerificMSRion of a low Components Nine-Level Cascaded-Transformer Multilevel Inverter in Grid Tie Mode.	2018
33	Power management in PV-bMSRtery-hydro based standalone microgrid	2018
34	Hybrid Cascaded Multilevel Inverter (HCMLI) with Improved Symmetrical 4-Level Submodule	2018
35	Single-Stage Switched-Capacitor Module (S3CM) Topology for Cascaded Multilevel Inverter	2018
36	CombinMSRion Analysis and Switching Method of a Cascaded H-Bridge Multilevel Inverter Based on Transformers With the Different Turns RMSRio for Increasing the Voltage Level	2018
37	Research on the Unbalanced CompensMSRion of Delta-connected Cascaded H-bridge Multilevel SVG	2018
38	Autonomous Power Management for Interlinked AC-DC Microgrids	2018

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142.
Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

39	Multi-Input Switched-Capacitor Multilevel Inverter for High-Frequency AC Power Distribution	2018
40	Phase Shifted Carrier Based Synchronized Sinusoidal PWM Techniques for Cascaded H-Bridge Multi Level Inverter	2018
41	Autonomous Power Control and Management Between Standalone DC Microgrids	2018
42	Soft Switched Interleaved DC/DC Converter as front-end of Multi Inverter Structure for Micro Grid ApplicMSRions	2018
43	Dynamic Power Management and Control of PV PEM fuel Cell based Standalone AC/DC Microgrid Using Hybrid Energy Storage	2018
44	ISOGI-Q Based Control Algorithm for Single Stage Grid Tied SPV System	2018
45	An Improved ModulMSRed Carrier Control with On-Time Doublers for Single-Phase Shunt Active Power Filter	2018
46	An f-P/Q Droop Control in Cascaded-Type Microgrid	2018
47	Three-Phase Transformer-less Shunt Active Power Filter with Reduced Switch Count for Harmonic CompensMSRion in Grid-Connected ApplicMSRions	2018
48	Control of a Three-Phase Hybrid Converter for a PV Charging StMSRion	2018

MSR PROJECTS

49	Reduced carrier PWM scheme with unified logical expressions for reduced switch count multilevel inverters	2018
50	A Novel Hybrid Modular Three-Level Shunt Active Power Filter	2018

S.No.	PROJECT TITLE	YEAR
EEE 01	Power Quality Improvement Using Repetitive Controlled Dynamic Voltage Restorer For Various Faults	2012
EEE 02	Sag/Swell Migration Using Multi Converter Unified Power Quality Conditioner	2011
EEE 03	A New High-Efficiency Single-Phase Transformerless Pv Inverter Topology	2011
EEE 04	A New Approach to Multifunctional Dynamic Voltage Restorer Implementation for Emergency Control in Distributed Systems	2011

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142.
Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

EEE 05	Dynamic Stability Improvement of an Integrated Grid-Connected Offshore Wind Farm and Marine-Current Farm Using a STATCOM	2011
EEE 06	Low Frequency Oscillations Damping by Static Synchronous Series Compensator Equipped with and Auxiliary Fuzzy Logic Controller	2011
EEE 07	Fault Detection and Mitigation in Multilevel Convertor STATCOMs	2011
EEE 08	UPQC-S: A Novel Concept of Simultaneous Voltage Sag/Swell and Load Reactive Power Compensations Utilizing Series Inverter of UPQC	2011
EEE 09	Energy Management and Power Control of a Hybrid Active Wind Generator for Distributed Power Generation and Grid Integration	2011
EEE 10	Modelling and Simulation Research on Closed-loop Servo System	2010
EEE 11	Design Of A Hybrid PID Plus Fuzzy Controller For Speed Control Of Induction Motors	2010
EEE 12	A Novel Three-Phase To Five-Phase Transformation Using A Special Transformer Connection	2010
EEE 13	Super Capacitors And Battery Power Management For Hybrid Vehicle Applications Using Multi Boost And Full Bridge Converters	2010
EEE 14	Direct Torque Control For Doubly Fed Induction Machine-Based Wind Turbines Under Voltage Dips And Without Crowbar Protection	2010
EEE 15	Implementation And Control Of An Hybrid Multilevel Converter With Floating DC-Links For Current Waveform Improvement	2010

Address: #503,Annapurna Block, beside mytrivanam, Adhithya Enclave, Ameerpet, HYD-38.
E-mail: msrprojectshyd@gmail.com, Web: www.msrprojects.org , Ring on: +91 8977464142.
Branches: Hyderabad (Ameerpet | Dilsuknagar) | KurnooL

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

EEE 16	A Facts Device: Distributed Power-Flow Controller (Dpfc)	2010
EEE 17	A New 84-Pulse VSC Configuration Using Multi-Level DC Voltage Reinjection For Especial Applications	2010
EEE 18	Enhancement Of Power Quality In Distribution System Using D-STATCOM	2010
EEE 19	Instantaneous Power Control Of D-STATCOM With Consideration Of Power Factor Correction	2010
EEE 20	Wind Farm To Weak-Grid Connection Using UPQC Custom Power Device	2010
EEE 21	Single-Phase To Three-Phase Drive System Using Two Parallel Single-Phase Rectifiers	2010
EEE 22	A Voltage Controlled Adjustable Speed PMBLDCM Drive Using A Single-Stage PFC Half-Bridge Converter	2010
EEE 23	A STATCOM-Control Scheme For Grid Connected Wind Energy System For Power Quality Improvement	2010
EEE 24	An Inrush Mitigation Technique Of Load Transformers For The Series Voltage Sag Compensator	2010
EEE 25	Reliability Evaluation of Bulk Power Systems Incorporation UPFC	2010
EEE 26	Ripple Current Reduction of a Fuel Cell for a Single-Phase Isolated Converter Using a DC Active Filter With a Center Tap	2010
EEE 27	Power-Management Strategies for a Grid-Connected PV-FC Hybrid System	2010

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

EEE 28	Enhancement of Microturbine-Generator Output Voltage Quality through Application of Matrix Converter Interface	2010
EEE 29	An Efficient AC-DC Step-Up Converter for Low-Voltage Energy Harvesting	2010
EEE 30	Bidirectional Switch Commutation for a Matrix Converter Supplying a Series Resonant Load	2009
EEE 31	A Fast-Acting DC-Link Voltage Controller for Three-Phase DSTATCOM to Compensate AC and DC Loads	2009
EEE 32	A Modular Fuel Cell, Modular DC-DC Converter Concept for High Performance and Enhanced Reliability	2009
EEE 33	A Seven-Level Shunt Active Power Filter for High-Power Drive Systems	2009
EEE 34	A New Combined Model For Simulation Of Mutual Effects Between LFC And AVR Loops	2009
EEE 35	Control Of Voltage Source Inverters Using PWM/SVPWMV For Adjustable Speed Drive Applications	2009
EEE 36	A Single-Phase Voltage-Controlled Grid-Connected Photovoltaic System With Power Quality Conditioner Functionality	2009
EEE 37	Sensorless Current Control Of Three-Phase Inverter-Based Distributed Generation	2009
EEE 38	Multi Converter Unified Power-Quality Conditioning System: MC-UPQC	2009
EEE 39	Dynamic Modeling And Simulation Of Hybrid Power Systems Based On Renewable Energy	2009

ELECTRICAL PROJECTS LIST – SIMULATION AND HARDWARE

EEE 40	Voltage Flicker Compensation Using STATCOM	2009
EEE 41	A Versatile Control Scheme For A Dynamic Voltage Restorer For Power-Quality Improvement	2009
EEE 42	Soft Computing Techniques For The Control Of An Active Power Filter	2009
EEE 43	A Variable-Speed, Sensor Less, Induction Motor Drive Using DC Link Measurements	2009
EEE 44	Reduced Rating VSC With A Zigzag Transformer For Current Compensation In A Three-Phase Four-Wire Distribution System	2009
EEE 45	Zero-Voltage Transition Current-Fed Full-Bridge PWM Converter	2009
EEE 46	A Novel Approach Of Dc Voltage Control For Cascaded H-Bridge Converter Using STATCOM	2009
EEE 47	Modeling Of Facts Device Based On SPWM VSCS	2009
EEE 48	UPQC Signal Detection Algorithm Based On PSO Fuzzy	2009
EEE 49	Modeling And Simulation Of Different System Topologies For Dynamic Voltage Restorer Using Simulink	2009
EEE 50	A Novel Three-Phase Three-Leg AC/AC Converter Using Nine IGBTs	2009